

## **Abstract**

Liquid filter arrangements are provided. In general, the liquid filter arrangements comprise a housing, a primary filter element, a secondary filter construction and a bypass valve arrangement. The components are arranged such that in normal operation, liquid flows through the primary filter element and then through the secondary filter construction; and, such that during bypass valve operation, flow circumvents the primary filter element and is directed through the secondary filter construction, before leaving the liquid filter arrangement. Both a disposable spin on embodiment and a serviceable cartridge embodiment are provided.